

Claims

1. Electronic equipment which operates on the basis of a predetermined power source, characterized by comprising:

5 a body at least having processing means for executing various processes and consuming power; and

a power source connected to the body via a predetermined bus, including a secondary battery, secondary battery control means for controlling the secondary battery,
10 a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power generating unit to generate power, and fuel cell control means for controlling the fuel cell, wherein

the secondary battery control means and the fuel cell
15 control means mutually transfer at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and fuel cell status information indicative of a status of the fuel battery, to each other via the bus.

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2. The electronic equipment according to claim 1, characterized in that the fuel cell control means acquires load information indicative of a load of the processing means via the bus and controls the fuel cell on the basis of the
25 load information.

3. The electronic equipment according to claim 2, characterized in that the fuel cell control means sets a plurality of operating modes for the fuel cell and determines
30 an operating mode for the fuel cell on the basis of the load information.

4. The electronic equipment according to claim 3,
characterized in that the fuel cell control means determines
the operating mode for the fuel cell by further taking the
5 remaining secondary battery power information and the fuel
cell status information into account.

5. The electronic equipment according to claim 1,
characterized in that the fuel cell control means performs
10 control so as to charge the second battery with the power
outputted from the fuel cell.

6. The electronic equipment according to claim 1,
characterized in that the fuel cell control means monitors
15 a remaining amount of the fuel to be supplied to the fuel cell
and controls the fuel cell on the basis of the remaining
amount.

7. The electronic equipment according to claim 1,
20 characterized by comprising control means connected to the
bus, for monitoring a remaining amount of the fuel stored in
a tank for supplying the fuel to the fuel cell, wherein
the fuel cell control means controls the fuel cell on
the basis of the remaining amount of the fuel detected by the
25 control means.

8. The electronic equipment according to claim 1,
characterized in that the secondary battery and the secondary
battery control means as well as the fuel cell and the fuel
30 cell control means are constructed as a single package and
are externally connected to the body via the bus.

9. The electronic equipment according to claim 1,
characterized in that the secondary battery and the secondary
battery control means are contained in the body, while the
5 fuel cell and the fuel cell control means are constructed as
a single package and are externally connected to the body via
the bus.

10. The electronic equipment according to claim 1,
10 characterized in that the fuel cell and the fuel cell control
means are contained in the body, while the secondary battery
and the secondary battery control means are constructed as
a single package and are externally connected to the body via
the bus.

15 11. The electronic equipment according to claim 1,
characterized in that the secondary battery and the secondary
battery control means are constructed as a single package and
are externally connected to the body via the bus, while the
20 fuel cell and the fuel cell control means are constructed as
a single package separate from the package and are externally
connected to the body via the bus.

12. The electronic equipment according to claim 1,
25 characterized in that the secondary battery and the secondary
battery control means as well as the fuel cell and the fuel
cell control means are contained in the body.

13. The electronic equipment according to claim 1,
30 characterized in that the bus performs two-wire half-duplex
communication.

14. A power management method for electronic equipment which includes: a body at least having processing means for executing various processes and consuming power;
5 and a power source connected to the body via a predetermined bus, including a secondary battery, secondary battery control means for controlling the secondary battery, a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power
10 generating unit to generate power, and fuel cell control means for controlling the fuel cell; wherein the electronic equipment operates on the basis of the power source,

the power management method for the electronic equipment, characterized by comprising:

15 a step of mutually transferring at least remaining secondary battery power information indicative of an amount of power remaining in the secondary battery and fuel cell status information indicative of a status of the fuel battery between the secondary battery control means and the fuel cell
20 control means via the bus; and

a step of controlling the fuel cell on the basis of the remaining secondary battery power information and the fuel cell status information.

25 15. The power management method for the electronic equipment according to claim 14, characterized by comprising:

a step of acquiring load information indicative of a load of the processing means by means of the fuel cell control
30 means via the bus, wherein

the fuel cell is controlled on the basis of the load

information in the step of controlling the fuel cell.

16. A power source equipment connected via a predetermined bus to a predetermined electronic equipment body at least
5 having processing means for executing various processes and consuming power, for supplying power to the electronic equipment body, the electronic equipment characterized by comprising:

a secondary battery;
10 secondary battery control means for controlling the secondary battery;

a fuel cell which causes a predetermined fuel and air to electrochemically react with each other so as to cause a power generating unit to generate power; and

15 fuel cell control means for controlling the fuel cell, wherein

the secondary battery control means and the fuel cell control means mutually transfer at least remaining secondary battery power information indicative of an amount of power
20 remaining in the secondary battery and fuel cell status information indicative of a status of the fuel battery, to each other via the bus.

17. The power source unit according to claim 16,
25 characterized in that:

the secondary battery control means and the fuel cell control means are connected to the electronic equipment body via the bus; and

the fuel cell control means acquires load information
30 indicative of a load of the processing means via the bus and controls the fuel cell on the basis of the load information.

18. The power source unit according to claim 17,
characterized in that the fuel cell control means sets a
plurality of operating modes for the fuel cell and determines
5 an operating mode for the fuel cell on the basis of the load
information.

19. The power source unit according to claim 18,
characterized in that the fuel cell control means determines
10 the operating mode for the fuel cell by further taking the
remaining secondary battery power information and the fuel
cell status information into account.

20. The power source unit according to claim 16,
15 characterized in that the fuel cell control means performs
control so as to charge the second battery with the power
outputted from the fuel cell.

21. The power source unit according to claim 16,
20 characterized in that the fuel cell control means monitors
a remaining amount of the fuel to be supplied to the fuel cell
and controls the fuel cell on the basis of the remaining
amount.

25 22. The power source unit according to claim 16,
characterized by comprising control means connected to the
bus, for monitoring a remaining amount of the fuel stored in
a tank for supplying the fuel to the fuel cell, wherein
the fuel cell control means controls the fuel cell on
30 the basis of the remaining amount of the fuel detected by the
control means.

23. The power source unit according to claim 16, characterized in that the bus performs two-wire half-duplex communication.